

Chapter 28

Report on Global Environment Competitiveness of Bolivia

Bolivia is located in South-Central America bordered by Brazil to the north and east, Paraguay and Argentina to the south, Chile to the southwest, and Peru to the west. It crosses the sub-tropical and tropical region. And poor in mineral resources. Bulivya has a total area of 1083.3 thousand of square kilometers. As of late 2011, the gross population was 10.09 million, with GDP reaching USD 23.95 billion. Through the evaluation of global environment competitiveness, we can know that the environment competitiveness index of Bolivia ranks at 15 among 133 countries.

Score:
55.22
Rank:
15

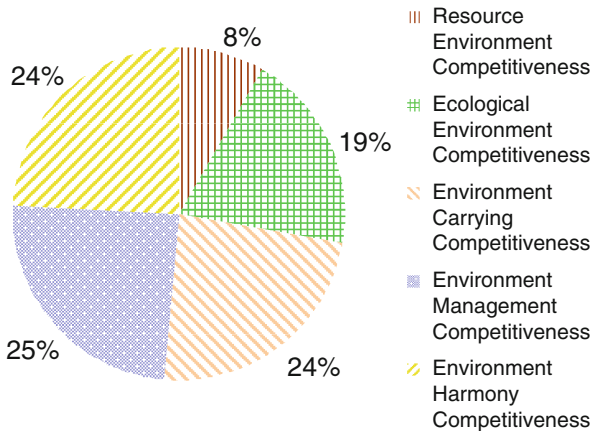


Fig. 28.1 Contribution of sub-index to GEC

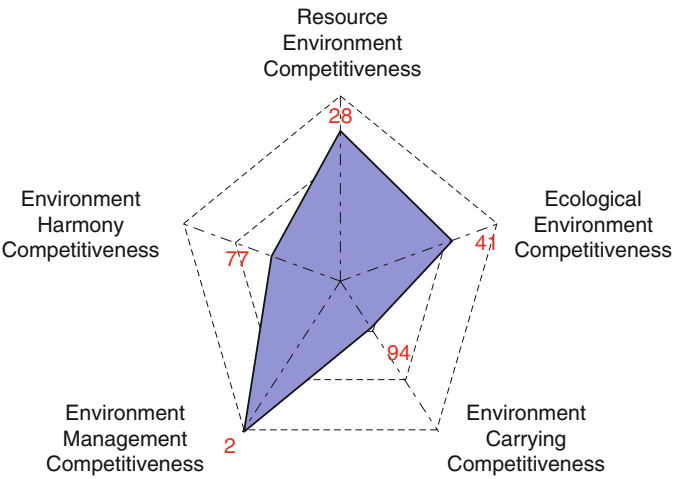


Fig. 28.2 Rank of sub-index of GEC

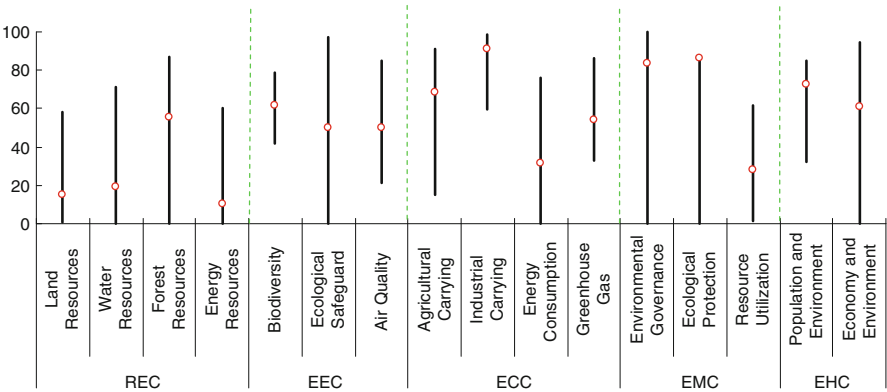


Fig. 28.3 Score and rank of the pillars of GEC

Table 28.1 Score and rank of all indicators of GEC

Indicators	Score	Rank	Indicators	Score	Rank
1 Resource Environment Competitiveness	22.83	28	Groundwater	17.25	45
1.1 Land Resources	14.83	53	Total internal renewable water resources	14.13	66
Land area per capita	19.34	12	1.3 Forest Resources	55.26	9
Percentage of arable land to total land area	5.85	109	Growing stock in forest and other wooded land	62.85	12
Arable land per capita	17.80	25	Proportion of land area covered by forest	61.51	14
1.2 Water Resources	19.18	55	Forest area per capita	39.33	5
Surface water	5.94	55	1.4 Energy Resources	10.20	44
Annual precipitation	39.41	49			

(continued)

Table 28.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
Fossil energy	0.00	61	Energy consumption per unit of land area	99.99	5
Energy production	1.70	41	Ratio of clean energy consumption	5.41	68
Proportion of combustible renewable and waste to total energy consumption	26.10	35	Elasticity of energy consumption	12.54	116
Net energy imports of the energy consumption	29.20	17	Elasticity of electric power consumption	9.08	107
2 Ecological Environment Competitiveness	53.63	41	3.4 Greenhouse Gas	54.30	115
2.1 Biodiversity	61.99	13	Growth rate of CO ₂ emissions	36.60	115
Threatened fish species	100.00	1	Growth rate of Methane emissions	49.11	117
Threatened mammal species	89.13	99	CO ₂ emissions per unit of land area	99.99	20
Threatened plant species	95.80	103	CO ₂ emissions per unit of energy consumption	49.20	50
GEF benefits index for biodiversity	12.50	24	4 Environment Management Competitiveness	67.88	2
2.2 Ecological Safeguard	50.00	15	4.1 Environmental Governance	83.50	79
Terrestrial protected areas	50.00	31	Agricultural chemicals regulation	N/A	N/A
Marine protected areas	N/A	N/A	Percentage of the rural population with access to an improved water source	71.00	89
2.3 Air Quality	50.09	96	Percentage of the urban population with access to an improved water source	96.00	89
Inhalable particles (PM10)	58.39	106	4.2 Ecological Protection	86.20	1
Particulate matter (PM2.5)	85.19	65	Area of plantation and afforestation	N/A	N/A
Index of indoor air pollution	17.90	81	Biome protect	86.20	32
Nitrogen oxides emission	65.78	97	Overfishing of fishing resources	N/A	N/A
Sulfur dioxide emission	40.92	24	4.3 Resource Utilization	27.84	106
3 Environment Carrying Competitiveness	65.15	94	Utilization rate of water resources	0.01	129
3.1 Agricultural Carrying	68.57	55	Percentage of total internal renewable water resources to total water resources	41.78	96
Cereal yield per unit of arable land	22.13	83	Percentage of agricultural land to total land area	40.32	88
Fertilizer consumption per unit of arable land	99.52	18	Percentage of fossil fuel energy consumption to total energy consumption	29.25	55
Annual freshwater withdrawals for agriculture per unit of arable land	99.54	42			
3.2 Industrial Carrying	91.23	71			
Net exports of goods as a percentage of GDP	75.91	87			
Electric power consumption per unit of value added of industry	93.60	46			
SO ₂ emissions per unit of value added of industry	99.89	45			
Annual freshwater withdrawals for industry per value added of industry	95.53	89			
3.3 Energy Consumption	31.76	92			

(continued)

Table 28.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
5 Environment Harmony Competitiveness	66.6	77	CO ₂ emissions per capita	96.27	44
5.1 Population and Environment	72.39	56	Energy consumption per capita	95.29	40
Percentage of population with access to Improved sanitation facilities	25.00	118	5.2 Economy and Environment	60.84	87
Motor vehicles per 1,000 people	91.85	44	Land resource utilization efficiency	0.01	124
Renewable internal freshwater resources per capita	36.40	11	Sulfur dioxide emissions per unit of GDP	95.61	60
SO ₂ emissions per capita	98.85	24	Carbon dioxide emissions per unit of GDP	73.85	104
			Energy consumption per unit of GDP	73.88	93

Table 28.2 Rank distribution of the individual indicators of GEC

Sub-index	Number of the individual indicators	Rank 1–10	Rank 11–30	Rank 31–60	Rank 61–100	Rank 101–133
Resource Environment Competitiveness	14	1	3	8	1	1
Ecological Environment Competitiveness	11	1	2	1	5	2
Environment Carrying Competitiveness	15	1	2	3	5	4
Environment Management Competitiveness	10	1	0	1	4	2
Environment Harmony Competitiveness	10	0	2	4	1	3
Total	60	4	9	17	16	12

Open Access This chapter is distributed under the terms of the Creative Commons Attribution Noncommercial License, which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.